

FIG. 1A

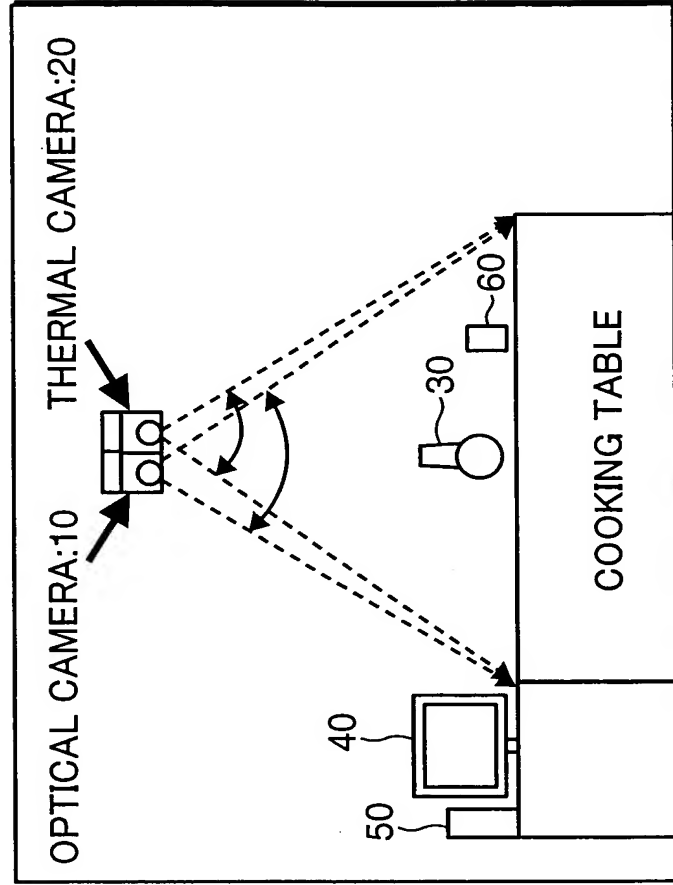


FIG. 1B

FIG. 2

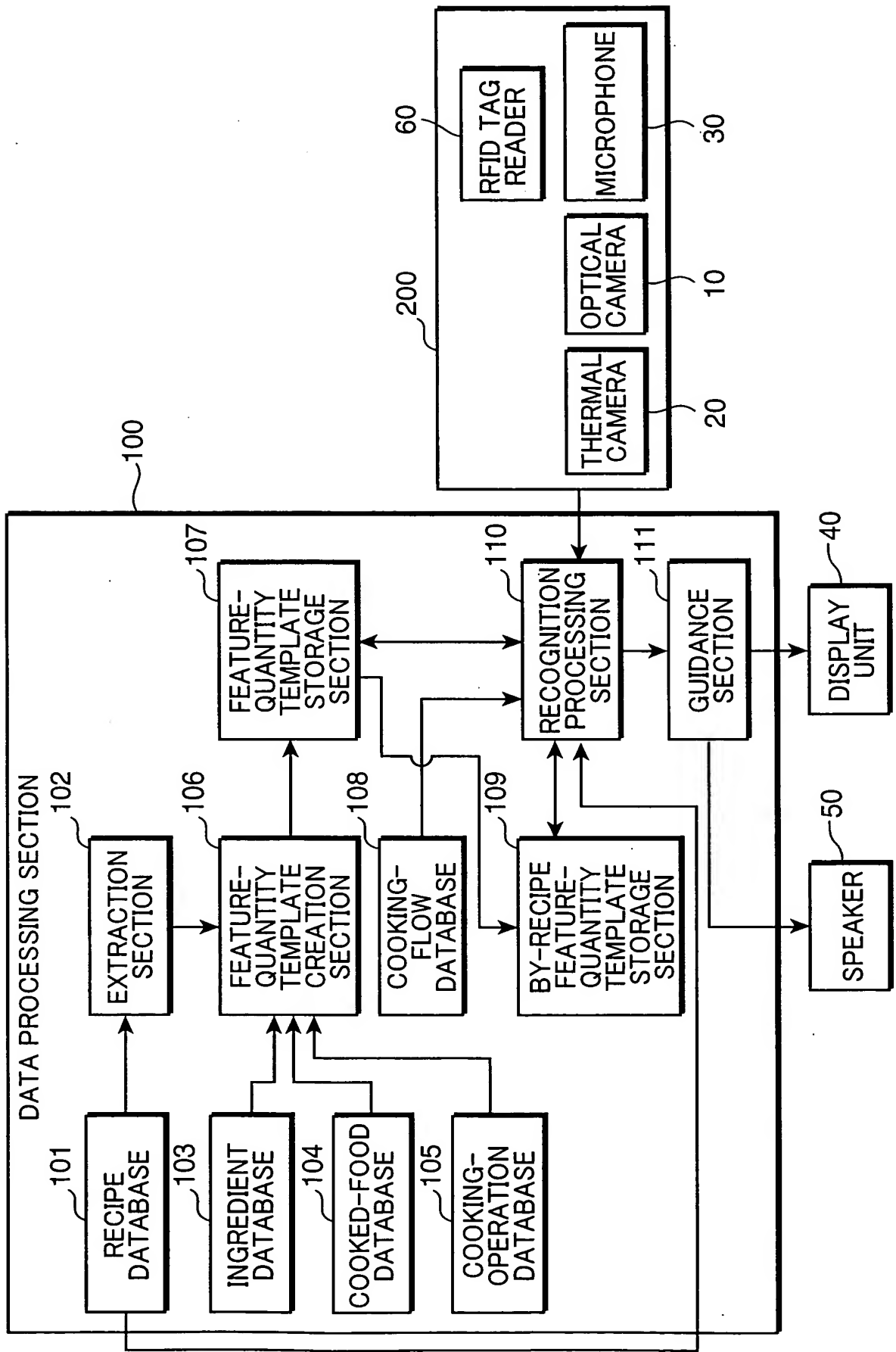


FIG. 3A

INGREDIENT TABLE

INGREDIENT NAME	COLOR (INCLUDING INSIDE INFORMATION)	SHAPE	SIZE
APPLE	OUT;RED(Δ),[IN;WHITE]	CIRCLE(Δ)	5cm x 5cm x 5cm(Δ)	
TOMATO	OUT;RED(x),[IN;RED]	CIRCLE(Δ)	5cm x 5cm x 5cm(Δ)	
DAIKON RADISH	OUT;WHITE(x),[IN;WHITE]	ELLIPSE(O)	5cm x 5cm x 35cm(Δ)	
...				

T1

FIG. 3B

COOKED-FOOD TABLE

COOKING OPERATION	CHANGE IN SHAPE	COLOR
FINE CUTTING	LARGE→SMALL,FEW→MANY(⊙)	OUT→IN(⊙)	
ROUND SLICING	→FLAT SURFACE(O)	OUT→OUT+IN(O)	
QUARTER CUTTING	1/4 SPHERE(Δ)	OUT→OUT+IN(O)	
CUTTING (JULIENNE CUTTING)	→THIN STRIP(⊙)	OUT→IN(O)	
PEELING	LITTLE CHANGE(x)	OUT→IN(⊙)	
BROILING	SLIGHT CHANGE(O)	BROWNE(⊙)	
BRAISING	HARD TO RECOGNIZE(x)	LARGE CHANGE(O)	

T2

FIG. 3C

COOKING-OPERATION TABLE

COOKING OPERATION	SOUND	HAND MOTION
FINE CUTTING	CONTINUOUS SOUND/HARD TO TELL FROM JULIENNE CUTTING(O)	QUICK(O)	
ROUND SLICING	CUTTING SOUND(Δ)	POSSIBLE MISJUDGMENT(Δ)	
QUARTER CUTTING	CUTTING SOUND(Δ)	POSSIBLE MISJUDGMENT(Δ)	
CUTTING (JULIENNE CUTTING)	CONTINUOUS SOUND/HARD TO TELL FROM FINE CUTTING(O)	QUICK(O)	
PEELING	LOW SOUND(x)	HARD TO JUDGE(x)	
BROILING	POSSIBLE MISJUDGMENT(Δ)	UNABLE TO JUDGE(x)	
BRAISING	POSSIBLE JUDGMENT DELAY(x)	UNABLE TO JUDGE(x)	

T3

FIG. 3D

◎ : WEIGHTING VALUE = 0.8 ~ 1.0(0.90)
O : WEIGHTING VALUE = 0.5 ~ 0.8(0.65)
Δ : WEIGHTING VALUE = 0.2 ~ 0.5(0.35)
x : WEIGHTING VALUE = 0.2 ~ 0.0(0.10)

FIG. 4

FEATURE-QUANTITY TEMPLATE

INGREDIENT NAME	FINE CUTTING	ROUND SLICING
APPLE	x INAPPLICABLE[NO MENU]	O RED→RED+WHITE, A FEW→MANY
TOMATO	Δ→SMALL[SHAPE IS LOST, UNABLE TO JUDGE COLOR]	O→FLAT[HARD TO JUDGE COLOR]
DAIKON RADISH	O→FREQUENTLY[UNABLE TO JUDGE COLOR]	O→FLAT[HARD TO JUDGE COLOR]
...		
...		

T4

QUARTER CUTTING	JULIENNE CUTTING
O RED→RED+WHITE[HARD TO JUDGE SHAPE]	x INAPPLICABLE[NO MENU]
O→1/4SPHERE[HARD TO JUDGE COLOR]	x INAPPLICABLE[NO MENU]
O→1/4SPHERE[HARD TO JUDGE COLOR]	◎→THIN STRIP[HARD TO JUDGE COLOR]

PEELING	BROILING	BRAISING
◎ RED→WHITE	◎ BROWNED	x INAPPLICABLE
Δ[HARD TO JUDGE]	Δ[HARD TO JUDGE]	x [SHAPE IS LOST]
Δ[HARD TO JUDGE]	○ BROWNED	Δ COLORED

FIG. 5-1/2

BY-RECIPE FEATURE-QUANTITY TEMPLATE

BAKED APPLE AND TOMATO

INGREDIENT NAME	CUTTING	PEELING
APPLE	x [NO MENTION IN RECIPE]	x [NO MENTION IN RECIPE]
TOMATO	⊙(FINE CUTTING)→ SMALL[NO PEELING/BAKING]	x [NO MENTION IN RECIPE]
DAIKON RADISH	x [NO MENTION IN RECIPE]	x [NO MENTION IN RECIPE]
...		

T5

	BROILING	BRAISING
	⊙BROWNED[NO CUTTING]	x [NO MENTION IN RECIPE]
	x [NO MENTION IN RECIPE]	x [NO MENTION IN RECIPE]
	x [NO MENTION IN RECIPE]	x [NO MENTION IN RECIPE]

FIG. 5-2/2

BY-RECIPE FEATURE-QUANTITY TEMPLATE

SALAD AND DAIKON RADISH SIMMERED IN BROTH

INGREDIENT NAME	CUTTING	PEELING
APPLE	O(QUARTER CUTTING)RED→ RED+WHITE[HARD TO JUDGE SHAPE]	◎RED→WHITE
TOMATO	O(ROUND CUTTING)→ FLAT[HARD TO JUDGE COLOR]	Δ[COLORED]
DAIKON RADISH	◎(JULIENNE CUTTING)→ THIN STRIP[HARD TO JUDGE COLOR]	Δ[COLORED]
...		

T6

BROILING	BRAISING
× [NO MENTION IN RECIPE]	× [NO MENTION IN RECIPE]
× [NO MENTION IN RECIPE]	× [NO MENTION IN RECIPE]
OBROWNED	× [NO MENTION IN RECIPE]

FIG. 6

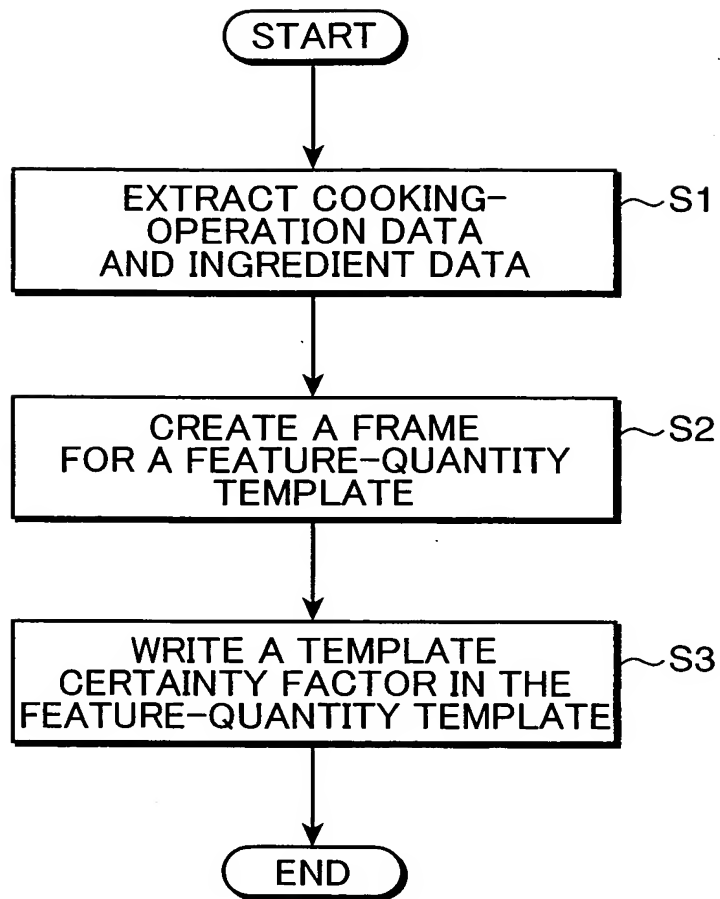


FIG. 7-1/3

INGREDIENT TABLE

INGREDIENT NAME	COLOR (INCLUDING INSIDE INFORMATION)	SHAPE	SIZE
APPLE	OUT;RED(Δ),[IN;WHITE]	CIRCLE(Δ)	5cm x 5cm x 5cm(Δ)	R1
TOMATO	OUT;RED(x),[IN;RED]	CIRCLE(Δ)	5cm x 5cm x 5cm(Δ)	
DAIKON RADISH	OUT;WHITE(x),[IN;WHITE]	ELLIPSE(O)	5cm x 5cm x 35cm(Δ)	
...				

T1

COOKED-FOOD TABLE

COOKING OPERATION	CHANGE IN SHAPE	SIZE
FINE CUTTING	LARGE→SMALL,A FEW→MANY(\odot)	OUT→IN(\odot)	R2
ROUND SLICING	→FLAT SURFACE(O)	OUT→OUT+IN(O)	
QUARTER CUTTING	1/4 SPHERE(Δ)	OUT→OUT+IN(O)	
CUTTING (JULIENNE CUTTING)	→THIN STRIP(\odot)	OUT→IN(O)	
PEELING	LITTLE CHANGE(x)	OUT→IN(\odot)	
BROILING	SLIGHT CHANGE(O)	BROWNED(\odot)	
BRAISING	HARD TO RECOGNIZE(x)	LARGE CHANGE(O)	

T2

FIG. 7-2/3

COOKING-OPERATION TABLE

COOKING OPERATION	SOUND	HAND MOTION
FINE CUTTING	CONTINUOUS SOUND/HARD TO TELL FROM JULIENNE CUTTING(O)	QUICK(O)	
ROUND SLICING	CUTTING SOUND(Δ)	POSSIBLE MISJUDGMENT(Δ)	~R3
QUARTER CUTTING	CUTTING SOUND(Δ)	POSSIBLE MISJUDGMENT(Δ)	
CUTTING (JULIENNE CUTTING)	CONTINUOUS SOUND/HARD TO TELL FROM FINE CUTTING(O)	QUICK(O)	
PEELING	LOW SOUND(x)	HARD TO JUDGE(x)	
BROILING	POSSIBLE MISJUDGMENT(Δ)	UNABLE TO JUDGE(x)	
BRAISING	POSSIBLE JUDGMENT DELAY(x)	UNABLE TO JUDGE(x)	~T3

FIG. 7-3/3

FEATURE-QUANTITY TEMPLATE

F11

INGREDIENT NAME	FINE CUTTING	ROUND SLICING
APPLE	x INAPPLICABLE[NO MENU]	O→RED→RED+WHITE,A FEW→MANY
TOMATO	Δ→SMALL[SHAPE IS LOST, UNABLE TO JUDGE COLOR]	O→FLAT[HARD TO JUDGE COLOR]
DAIKON RADISH	O→FREQUENTLY[UNABLE TO JUDGE COLOR]	O→FLAT[HARD TO JUDGE COLOR]
...		
...		

QUARTER CUTTING	JULIENNE CUTTING
O→RED→RED+WHITE[HARD TO JUDGE SHAPE]	x INAPPLICABLE[NO MENU]
O→1/4SPHERE[HARD TO JUDGE COLOR]	x INAPPLICABLE[NO MENU]
O→1/4SPHERE[HARD TO JUDGE COLOR]	◎→THIN STRIP[HARD TO JUDGE COLOR]

T4

PEELING	BROILING	BRAISING
◎RED→WHITE	◎BROWNED	x INAPPLICABLE
Δ[HARD TO JUDGE]	Δ[HARD TO JUDGE]	x [SHAPE IS LOST]
Δ[HARD TO JUDGE]	◎BROWNED	Δ COLORED

FIG. 8

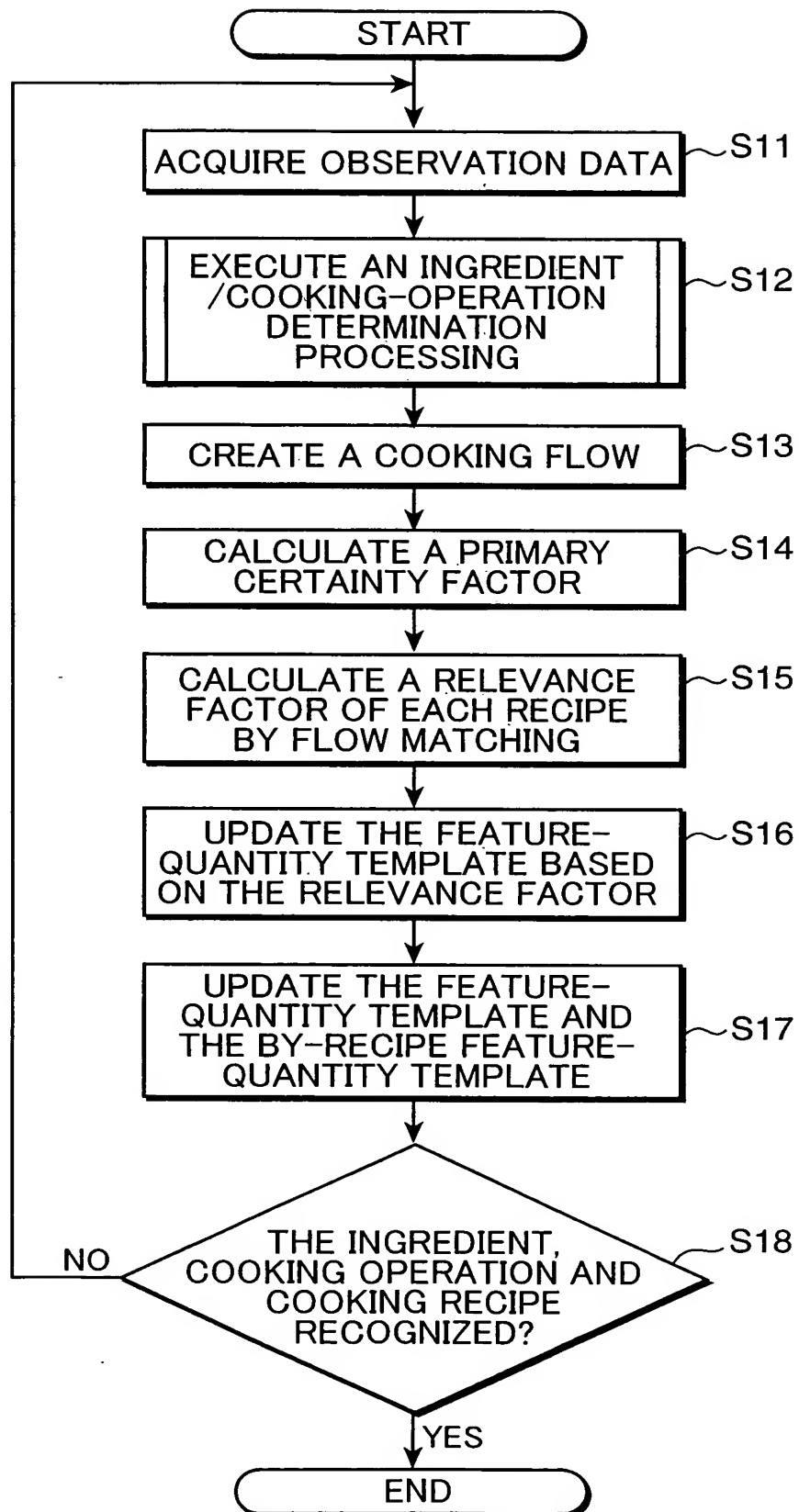


FIG.9A

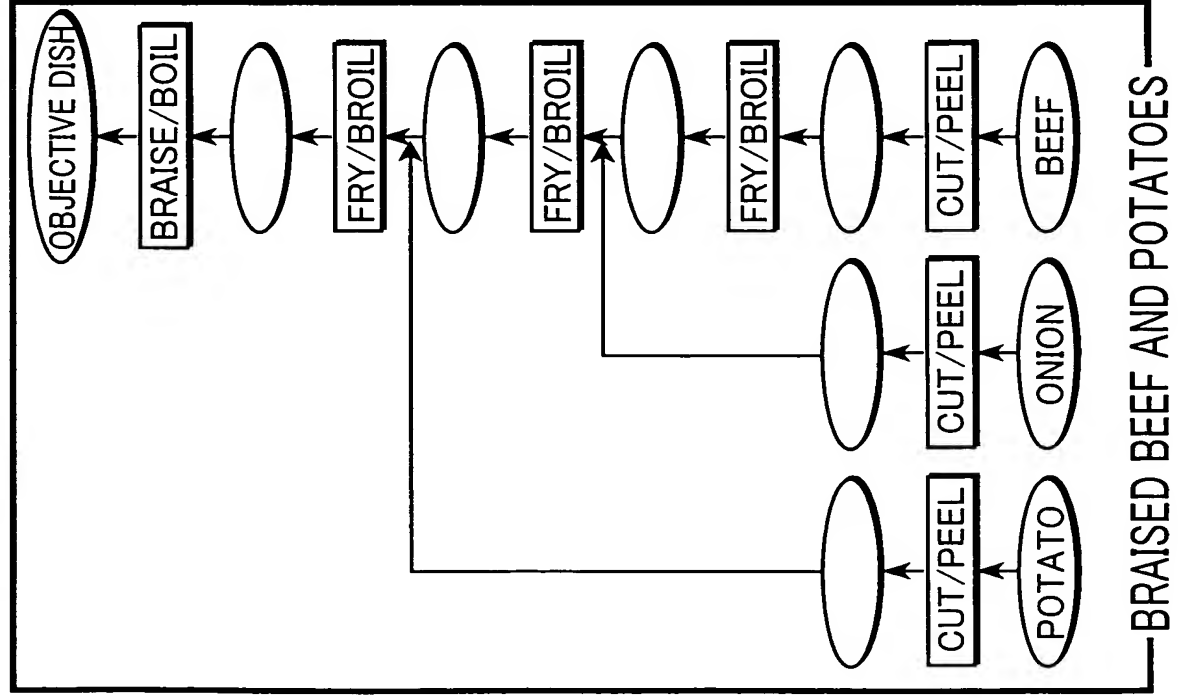


FIG.9B

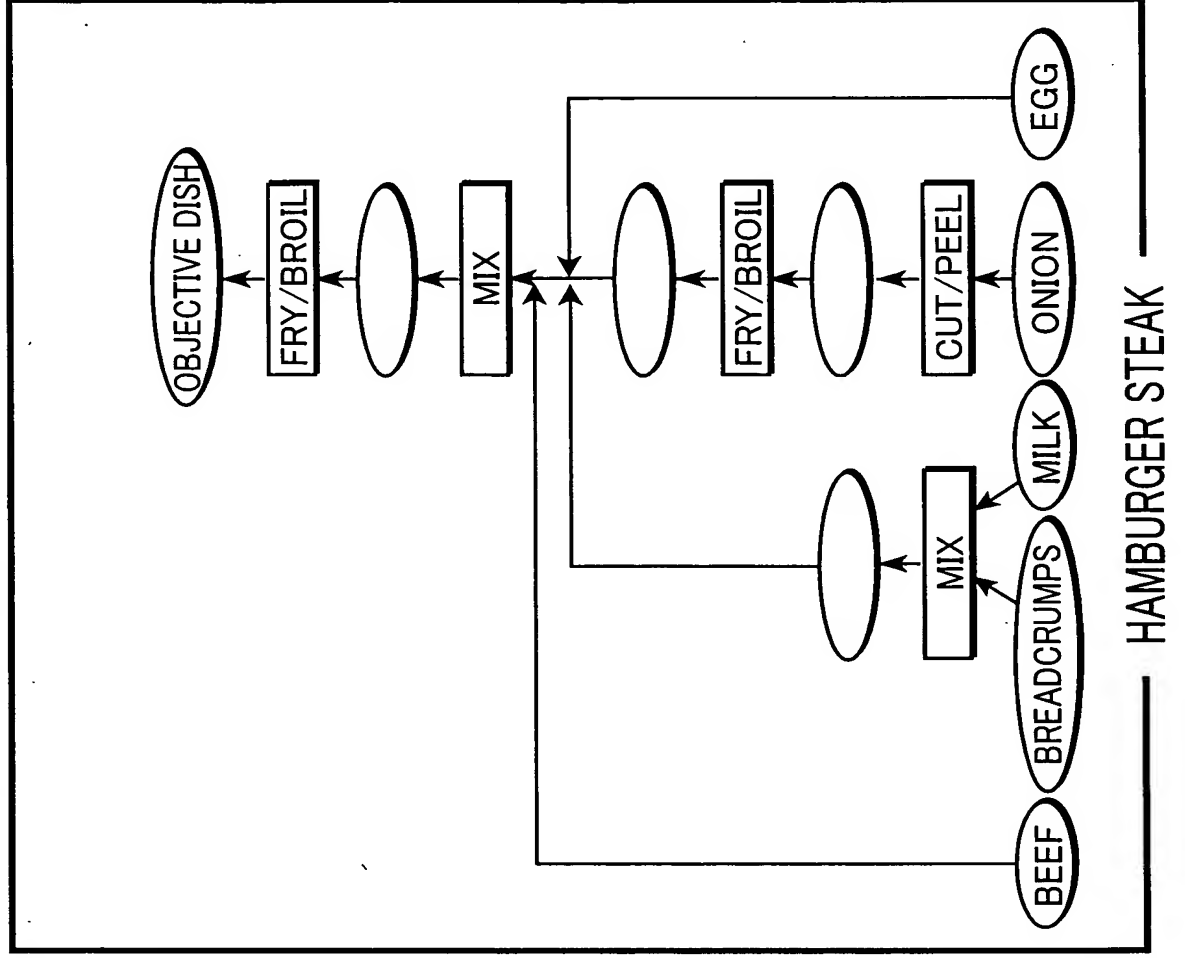


FIG. 11A

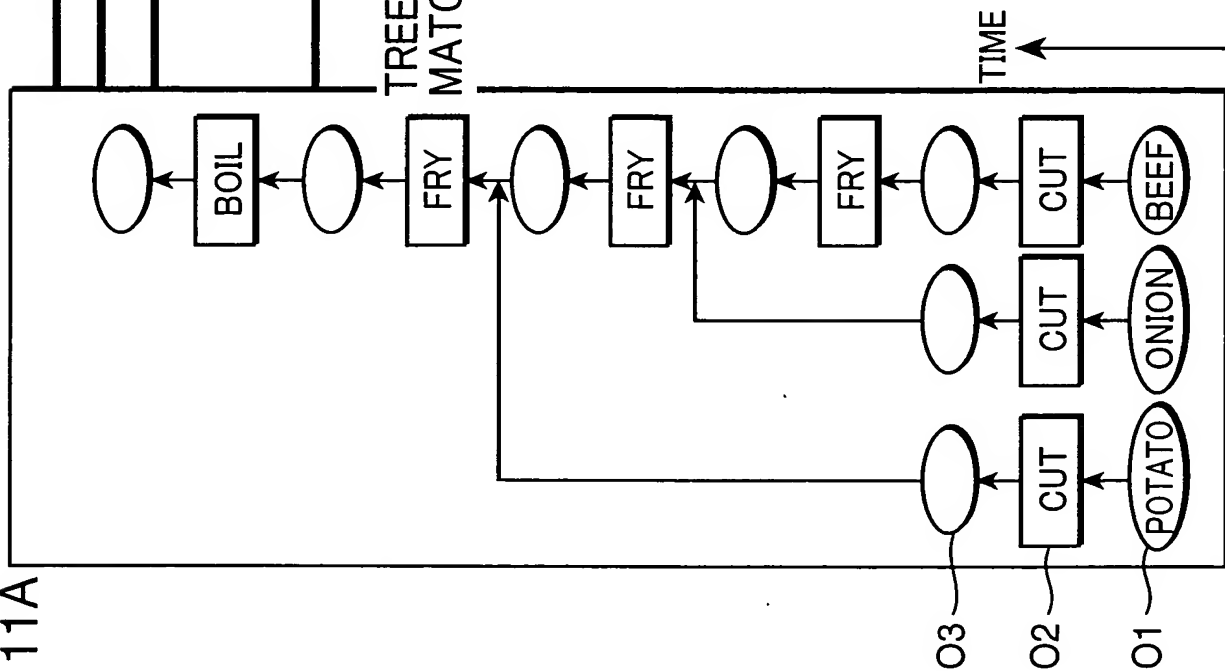


FIG. 11B

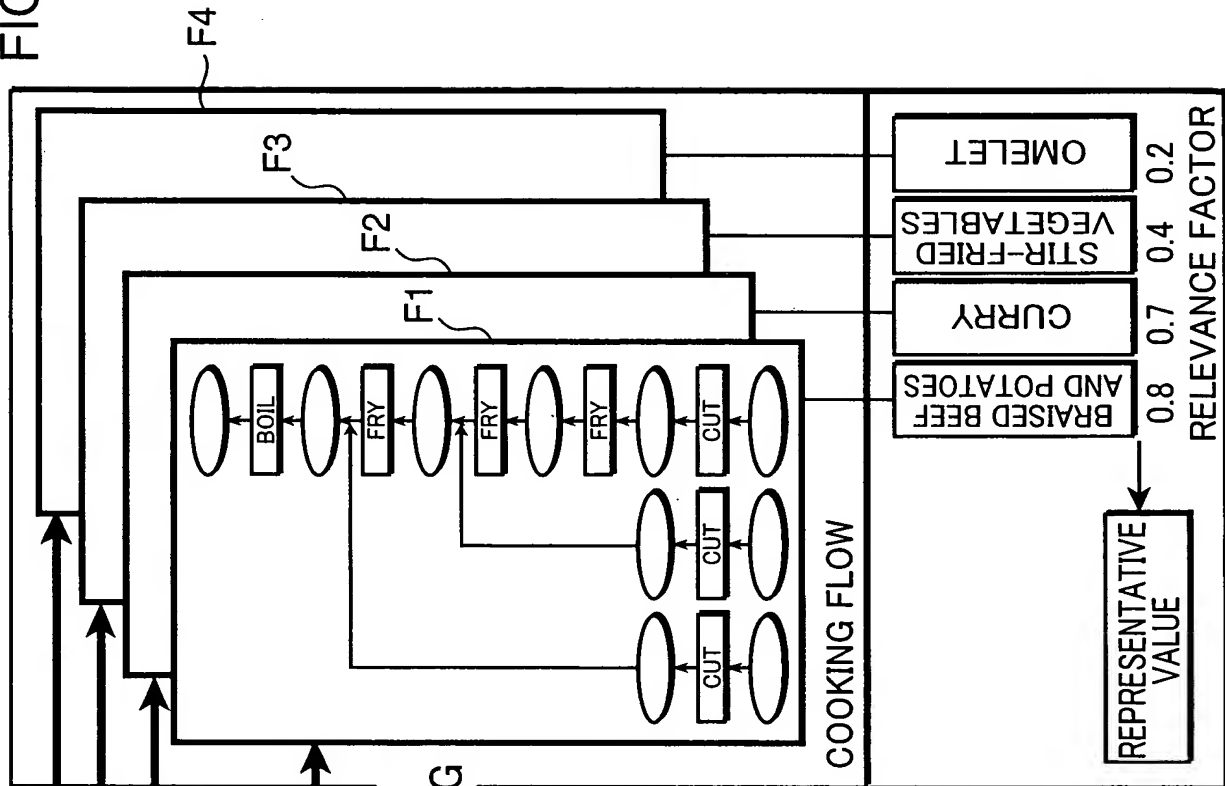


FIG. 12

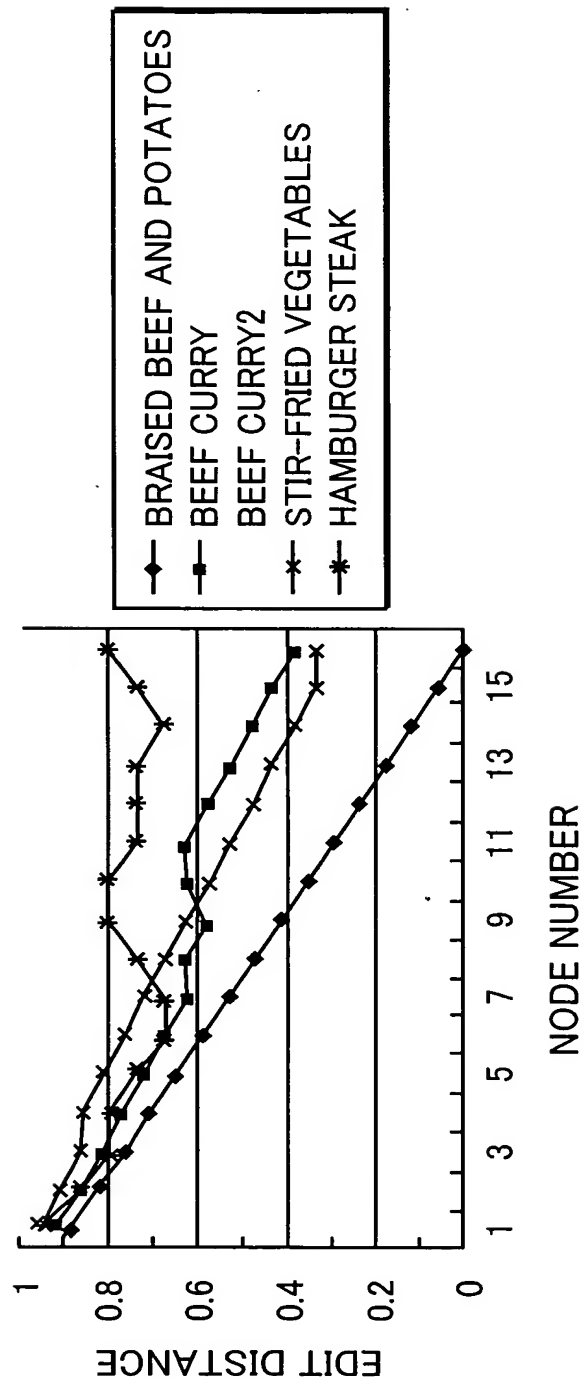
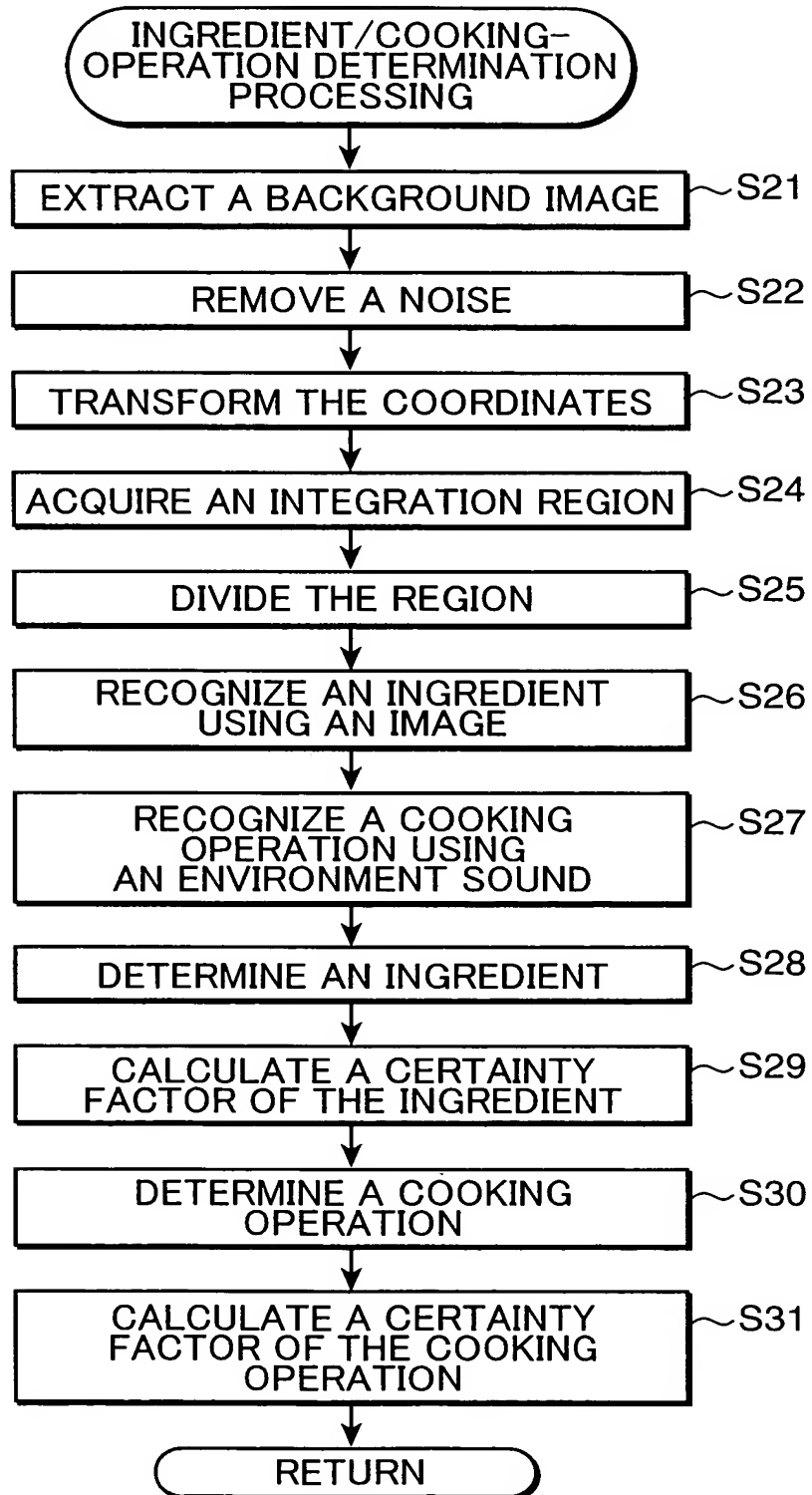


FIG.13



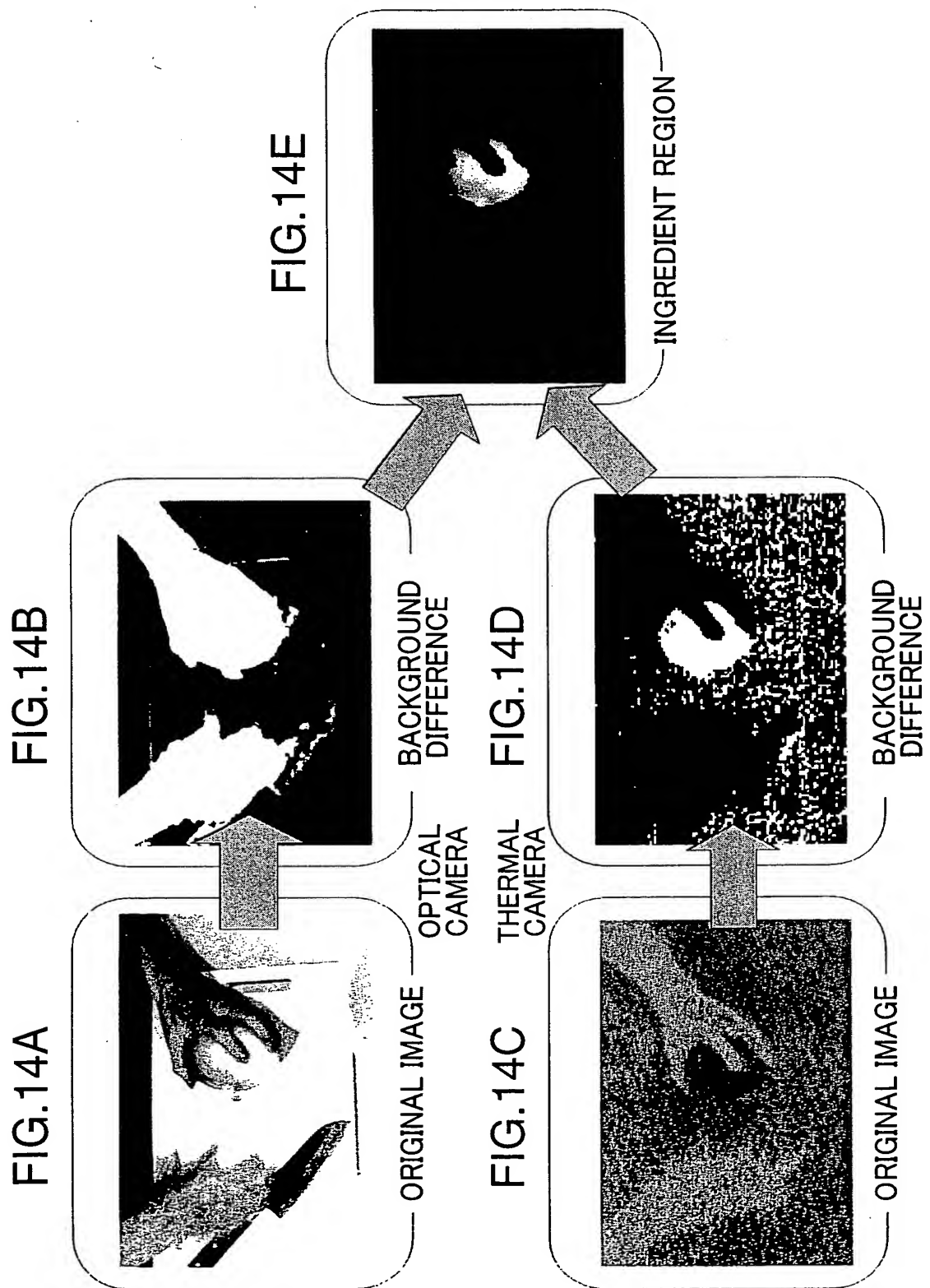


FIG. 15A

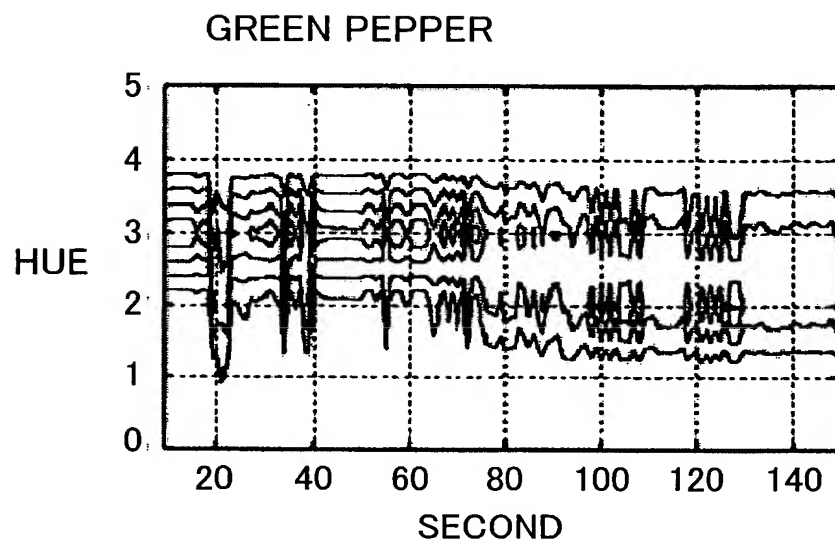


FIG. 15B

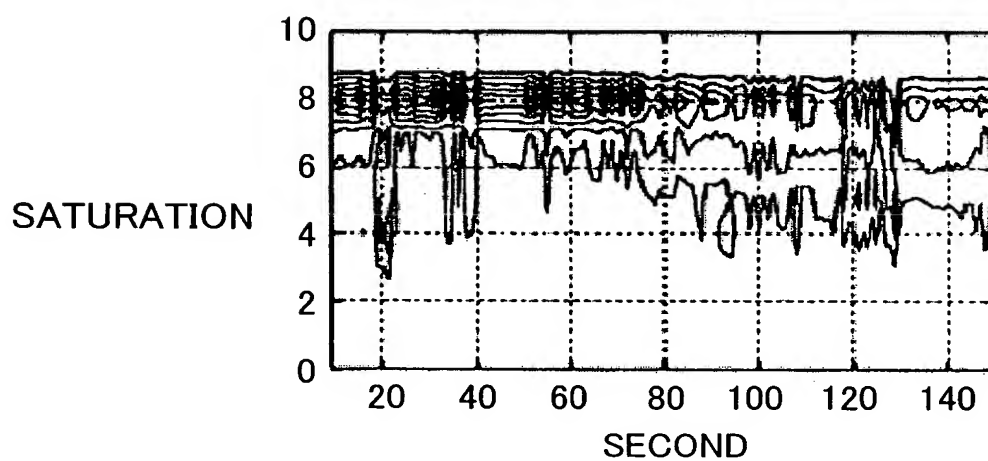


FIG. 15C

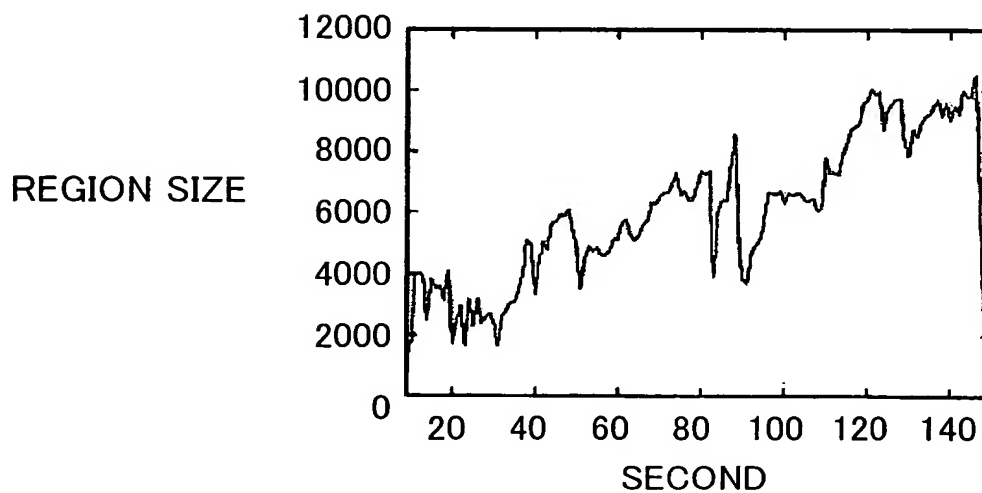


FIG. 16A

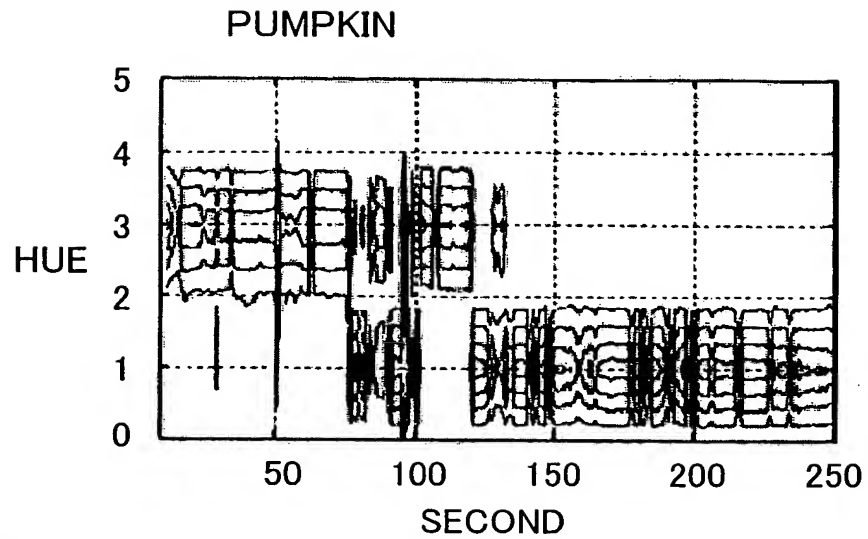


FIG. 16B

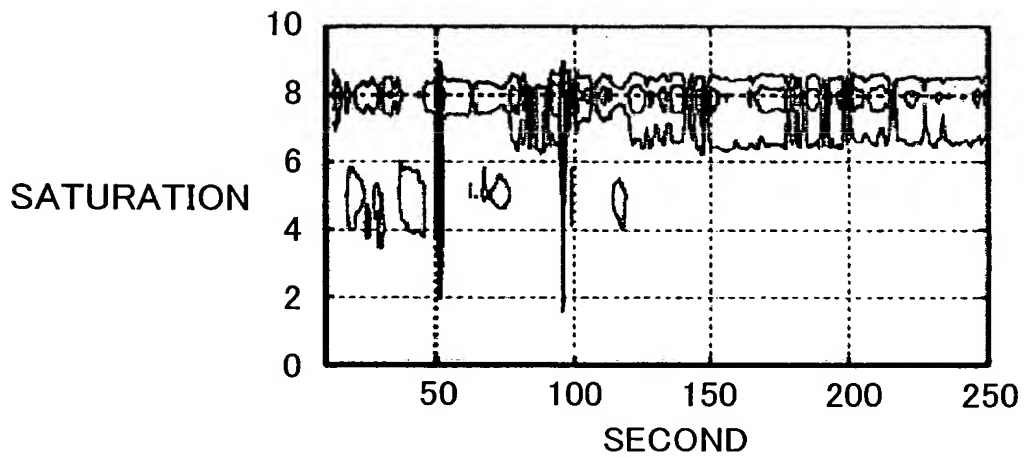


FIG. 16C

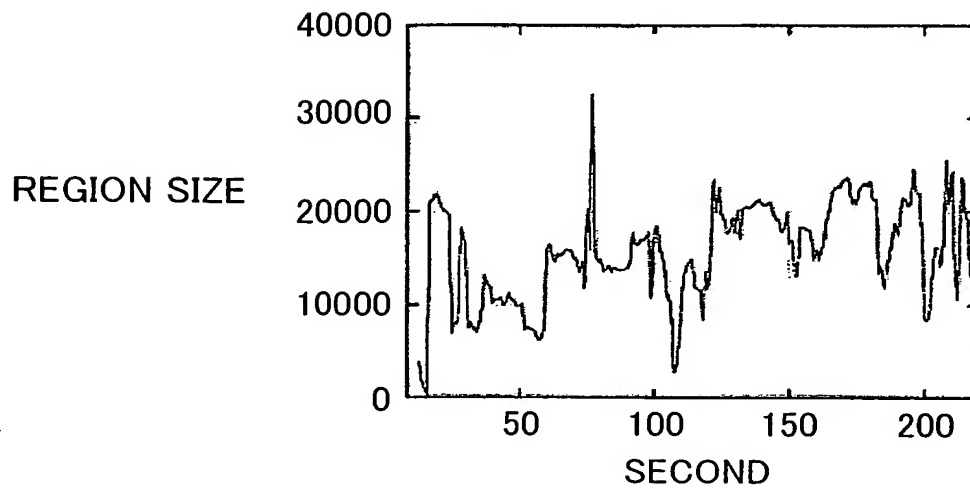


FIG. 17A BEFORE COOKING OPERATION (HUE)

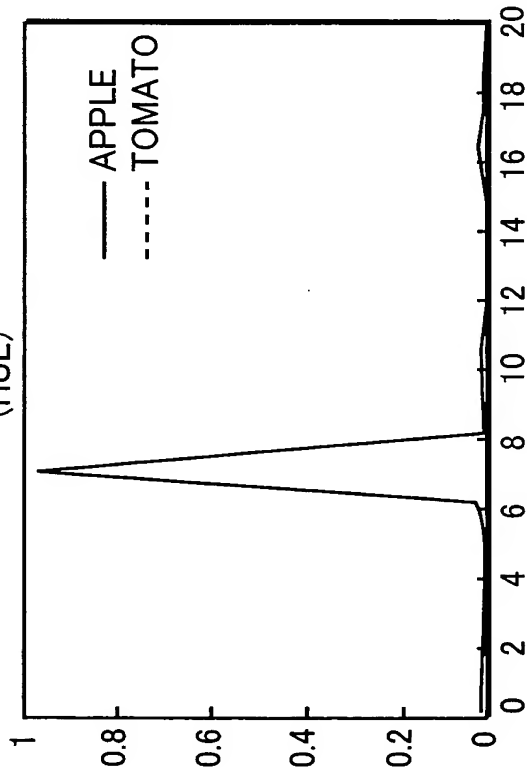


FIG. 17B

AFTER COOKING OPERATION (SATURATION)

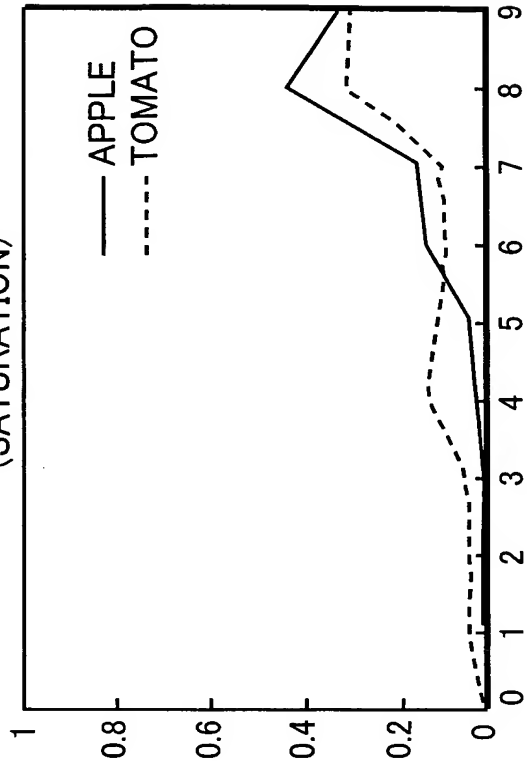


FIG. 17C BEFORE COOKING OPERATION (HUE)

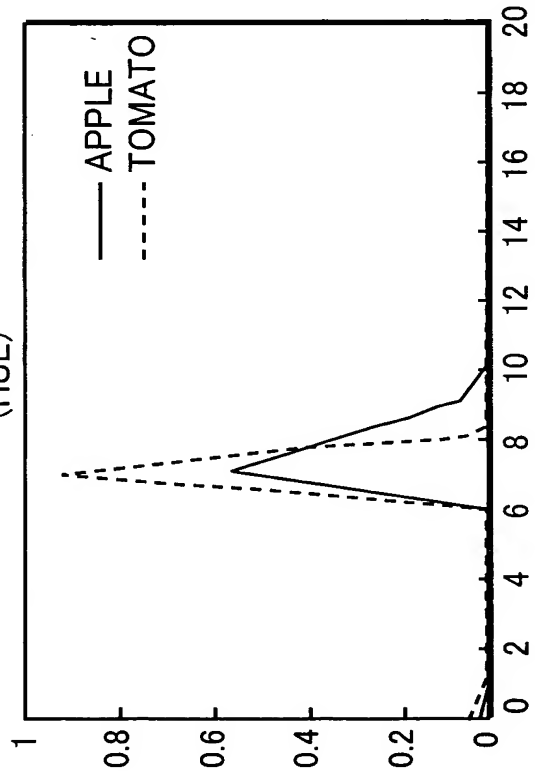


FIG. 17D

AFTER COOKING OPERATION (SATURATION)

